

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: CORELITE

Report Number: P937889

Luminaire Tested: SQ4-FB-125U-050D-B2750-1D-UNV-W2A-W-6-3500K

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937889
REPORT IS A COMBINATION OF REPORTS P933605 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-050D-B2750-1D-UNV-W2A-W-6-3500K
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

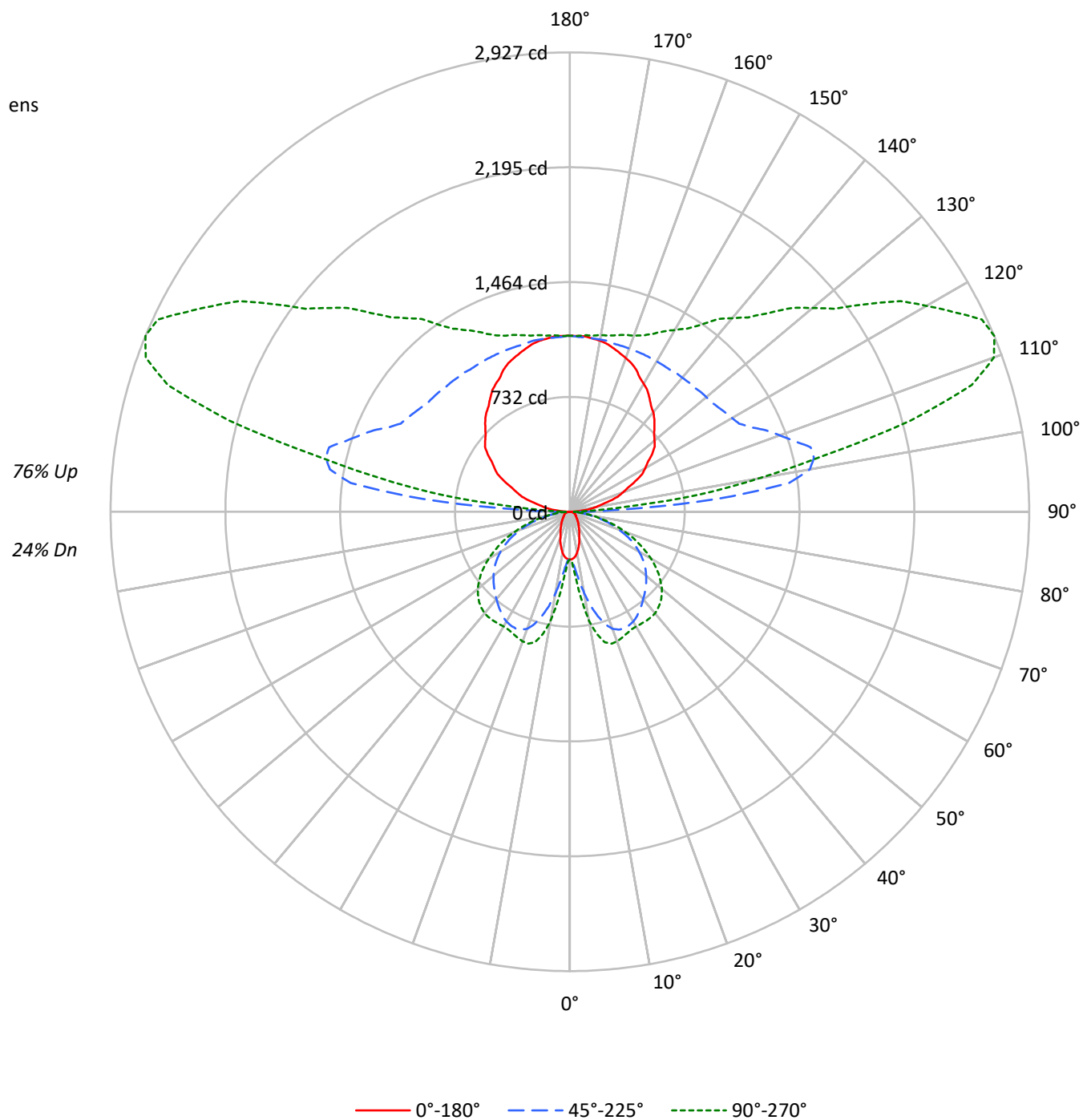
Lumens per Lamp: N/A
Luminaire Lumens: 9618.2 lumens
Efficiency: N/A
Efficacy: 134.7 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 71.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P937889

CATALOG NUMBER: SQ4-FB-125U-050D-B2750-1D-UNV-W2A-W-6-3500K

Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33			24
1	92	88	84	80	81	78	75	72	60	58	56	44	42	41	28	28	27			20
2	83	76	70	65	74	68	63	58	52	49	46	38	36	34	25	23	22			16
3	76	66	59	54	67	59	53	48	46	42	38	33	30	28	21	20	19			13
4	69	58	51	45	61	52	46	41	40	36	32	29	26	24	19	17	16			11
5	63	52	44	38	56	46	39	34	36	31	27	26	23	20	17	15	13			10
6	58	46	38	33	51	41	34	29	32	27	23	23	20	17	15	13	12			8
7	53	41	34	28	47	37	30	26	29	24	20	21	18	15	14	12	10			7
8	49	37	30	25	44	33	27	22	26	21	18	19	16	13	12	10	9			6
9	46	34	27	22	40	30	24	20	24	19	16	17	14	12	11	9	8			6
10	42	31	24	19	38	28	21	17	22	17	14	16	13	10	10	9	7			5

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1875	1875	1875
5°	1832	2167	2520
10°	1660	3158	4178
15°	1410	4124	5046
20°	1148	4779	5143
25°	958	4999	5038
30°	807	5029	5028
35°	713	4944	5158
40°	621	4835	5293
45°	562	4754	5314
50°	515	4681	5225
55°	493	4575	4994
60°	505	4372	4628
65°	523	4064	4125
70°	557	3541	3486
75°	614	2886	2721
80°	664	1998	1832
85°	584	1059	938

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5314 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.2	0.4
10°-20°	173.8	1.8
20°-30°	304.0	3.2
30°-40°	391.3	4.1
40°-50°	437.1	4.5
50°-60°	418.6	4.4
60°-70°	331.7	3.4
70°-80°	195.1	2.0
80°-90°	58.5	0.6
90°-100°	546.6	5.7
100°-110°	1437.0	14.9
110°-120°	1490.0	15.5
120°-130°	1195.2	12.4
130°-140°	937.8	9.7
140°-150°	719.8	7.5
150°-160°	518.4	5.4
160°-170°	317.2	3.3
170°-180°	107.2	1.1
0°-30°	517.0	5.4
0°-40°	908.3	9.4
0°-60°	1764.0	18.3
0°-90°	2349.2	24.4
90°-120°	3473.6	36.1
90°-150°	6326.3	65.8
90°-180°	7269.0	75.6
0°-180°	9618.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	303	303	303	303	303	
5°	295	317	357	404	418	27
15°	221	408	688	834	861	62
25°	141	463	820	856	857	65
35°	96	442	772	816	848	60
45°	65	353	682	782	817	51
55°	47	224	579	672	691	43
65°	37	119	430	483	490	37
75°	27	73	236	259	260	29
85°	10	22	58	64	65	10
90°	8	21	57	29	29	7
95°	72	283	942	485	330	80
105°	259	392	1589	2412	2250	274
115°	460	558	1273	2538	2897	454
125°	640	717	1158	1956	2307	568
135°	762	839	1121	1579	1790	590
145°	884	941	1107	1347	1452	554
155°	999	1027	1107	1215	1251	459
165°	1078	1093	1107	1151	1165	304
175°	1121	1121	1114	1129	1129	106
180°	1121	1121	1121	1121	1121	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	303.1	303.1	303.1	303.1	303.1	303.1	303.1	303.1	303.1	303.1	303.1
2.5°	303.1	303.1	305.0	306.0	308.0	309.0	311.0	312.9	318.7	319.7	321.6
5°	295.4	299.2	311.9	316.8	330.4	348.9	356.7	369.4	395.7	403.5	408.4
7.5°	283.6	292.4	323.5	331.4	365.5	414.2	434.7	462.0	503.9	524.4	541.0
10°	265.1	283.6	339.2	357.8	413.3	487.3	525.4	563.4	626.7	654.9	665.7
12.5°	244.7	274.9	355.7	381.1	461.1	569.2	615.0	657.0	729.1	767.1	772.9
15°	221.2	262.2	371.3	408.4	511.7	637.4	688.1	739.8	807.1	834.3	841.2
17.5°	200.8	252.4	386.0	425.0	550.7	698.8	750.5	793.4	848.0	866.5	871.3
20°	175.5	236.8	395.7	446.4	591.7	743.7	793.4	826.6	863.6	875.3	877.2
22.5°	156.9	220.3	401.6	454.2	618.9	770.9	812.9	839.2	864.5	868.4	869.4
25°	141.4	201.7	400.6	463.0	642.4	787.5	819.7	839.2	853.8	855.7	855.7
27.5°	126.7	181.3	396.7	464.9	659.9	791.5	816.8	830.4	837.2	841.2	841.2
30°	114.1	161.8	386.9	461.1	667.6	787.5	808.0	814.8	821.6	827.5	830.4
32.5°	104.3	143.3	372.3	453.2	668.6	777.8	792.4	796.3	806.0	819.7	824.6
35°	95.5	124.8	355.7	442.5	662.8	762.2	771.9	775.9	795.4	815.8	822.6
37.5°	86.7	111.1	334.3	424.0	654.0	743.7	750.5	757.4	787.5	811.9	819.7
40°	78.0	99.4	309.0	403.5	640.4	721.2	727.1	737.8	777.8	806.0	813.9
42.5°	71.1	89.6	281.7	382.1	622.8	695.9	704.7	720.3	766.1	796.3	805.0
45°	65.3	79.9	252.4	352.8	600.4	669.6	682.3	703.7	752.4	781.7	789.4
47.5°	59.5	73.1	222.2	322.6	576.1	643.3	659.9	684.2	733.9	762.2	769.0
50°	54.6	66.3	192.1	290.4	549.7	615.0	634.5	659.9	710.6	736.8	745.6
52.5°	50.7	60.5	163.8	258.3	519.5	585.8	608.2	634.5	682.3	707.7	713.5
55°	46.8	55.5	139.3	224.1	488.3	554.6	579.0	604.3	651.1	672.5	676.5
57.5°	44.9	51.6	118.9	192.1	455.1	519.5	546.8	570.2	614.1	630.6	634.5
60°	42.0	48.7	103.3	164.7	419.1	486.3	509.8	533.1	570.2	583.8	586.7
62.5°	39.0	46.8	91.7	138.4	382.1	447.4	470.7	492.3	523.4	533.1	537.0
65°	37.0	44.9	82.8	118.9	344.1	406.4	429.8	448.4	473.6	483.4	485.4
67.5°	35.1	42.9	76.1	102.3	306.0	365.5	383.0	400.6	420.1	429.8	430.8
70°	32.2	40.9	70.2	90.6	267.1	318.7	333.3	351.8	367.4	372.3	375.3
72.5°	30.2	38.0	66.3	81.9	227.1	273.8	287.5	298.3	311.9	316.8	316.8
75°	27.3	34.1	62.4	73.1	186.1	224.1	235.9	246.6	257.3	259.3	256.3
77.5°	24.3	30.2	53.6	61.4	145.3	177.4	187.1	193.0	201.7	203.7	204.7
80°	20.4	26.4	42.0	47.8	105.2	130.6	137.4	142.3	150.1	150.1	152.0
82.5°	15.6	20.4	30.2	34.1	71.1	89.6	95.5	98.5	103.3	103.3	103.3
85°	9.8	12.7	19.5	22.4	42.9	54.6	58.5	59.5	63.4	64.3	64.3
87.5°	4.8	6.8	12.7	13.7	22.4	28.3	28.3	30.2	30.2	29.3	28.3
90°	7.6	13.6	19.6	21.0	33.0	49.1	57.2	50.8	38.1	28.6	28.6
92.5°	30.1	81.3	132.5	145.3	204.2	282.8	322.1	282.3	202.7	143.0	137.3
95°	72.3	165.9	259.5	282.9	502.4	795.2	941.5	840.1	637.4	485.4	468.1
97.5°	124.9	207.5	290.1	310.8	676.7	1164.8	1408.8	1344.8	1216.7	1120.6	1087.8
100°	165.6	240.5	315.4	334.1	740.2	1281.8	1552.5	1557.2	1566.6	1573.6	1534.5
102.5°	200.2	270.1	340.0	357.5	769.4	1318.5	1593.1	1674.7	1838.0	1960.4	1927.0
105°	258.9	318.1	377.2	392.1	790.9	1322.8	1588.7	1771.6	2137.5	2411.9	2393.9
107.5°	319.1	374.2	429.5	443.2	795.0	1263.9	1498.4	1753.6	2264.0	2646.7	2651.1
110°	359.7	409.5	459.3	471.8	788.9	1211.6	1423.1	1708.3	2279.0	2707.0	2725.7

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	399.6	447.1	494.6	506.5	789.2	1166.1	1354.6	1646.5	2230.5	2668.5	2697.3
115°	459.8	503.6	547.5	558.4	796.5	1113.9	1272.6	1553.9	2116.5	2538.4	2578.3
117.5°	519.3	559.1	598.8	608.8	811.2	1081.1	1216.1	1470.0	1977.7	2358.5	2402.7
120°	553.9	591.4	628.8	638.2	823.3	1070.1	1193.5	1425.5	1889.4	2237.3	2280.3
122.5°	587.8	625.6	663.4	672.8	840.6	1064.3	1176.3	1385.2	1802.9	2116.2	2158.5
125°	639.6	674.1	708.5	717.2	864.0	1059.6	1157.5	1334.9	1689.7	1955.9	1995.0
127.5°	681.8	716.6	751.4	760.1	887.3	1056.9	1141.7	1294.0	1598.8	1827.2	1860.2
130°	704.4	741.9	779.3	788.7	904.3	1058.4	1135.6	1271.2	1542.5	1745.9	1776.4
132.5°	727.7	765.2	802.6	812.0	918.1	1059.6	1130.3	1251.8	1494.6	1676.7	1703.9
135°	762.3	796.4	830.5	839.1	933.1	1058.6	1121.3	1223.0	1426.4	1578.9	1602.3
137.5°	797.7	831.5	865.3	873.7	955.7	1065.1	1119.8	1205.7	1377.6	1506.6	1525.8
140°	827.0	858.1	889.3	897.0	969.5	1066.2	1114.5	1188.8	1337.3	1448.7	1466.7
142.5°	849.6	878.4	907.2	914.3	981.1	1070.1	1114.5	1179.8	1310.2	1408.1	1423.6
145°	884.2	909.3	934.4	940.7	996.1	1070.1	1107.0	1160.4	1267.1	1347.1	1358.8
147.5°	918.9	943.3	967.7	973.8	1018.2	1077.4	1107.0	1148.9	1233.0	1295.9	1305.6
150°	941.5	963.6	985.6	991.1	1029.8	1081.2	1107.0	1142.5	1213.4	1266.6	1274.4
152.5°	964.7	981.5	998.3	1002.4	1037.3	1083.7	1107.0	1137.2	1197.8	1243.2	1249.1
155°	999.4	1011.8	1024.1	1027.2	1053.8	1089.3	1107.0	1131.1	1179.3	1215.4	1219.4
157.5°	1025.0	1037.0	1049.0	1052.0	1070.4	1094.8	1107.0	1125.7	1163.2	1191.3	1194.0
160°	1042.3	1051.7	1061.1	1063.4	1077.9	1097.3	1107.0	1123.1	1155.1	1179.3	1180.8
162.5°	1059.6	1066.6	1073.7	1075.4	1086.0	1100.0	1107.0	1120.6	1147.6	1167.9	1169.5
165°	1078.4	1084.8	1091.2	1092.7	1097.5	1103.8	1107.0	1116.7	1136.2	1150.7	1152.2
167.5°	1095.7	1098.7	1101.8	1102.5	1106.5	1111.8	1114.5	1120.9	1133.6	1143.1	1143.8
170°	1107.0	1110.0	1113.0	1113.8	1114.1	1114.4	1114.5	1120.9	1133.6	1143.1	1143.1
172.5°	1113.0	1113.7	1114.4	1114.5	1114.5	1114.5	1114.5	1119.6	1129.6	1137.1	1136.5
175°	1121.3	1121.3	1121.3	1121.3	1119.1	1116.1	1114.5	1117.7	1124.1	1128.9	1128.9
177.5°	1121.3	1121.3	1121.3	1121.3	1119.6	1117.2	1116.0	1118.5	1123.6	1127.3	1126.7
180°	1121.3	1121.3	1121.3	1121.3	1121.3	1121.3	1121.3	1121.3	1121.3	1121.3	1121.3

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	303.1	303.1
2.5°	323.5	321.6
5°	416.2	418.1
7.5°	560.5	559.5
10°	696.9	705.6
12.5°	796.3	798.3
15°	856.8	860.7
17.5°	880.1	881.1
20°	881.1	879.2
22.5°	870.4	868.4
25°	857.8	856.8
27.5°	846.0	847.0
30°	841.2	844.1
32.5°	841.2	846.0
35°	843.1	848.0
37.5°	842.2	848.0
40°	838.2	845.1
42.5°	827.5	832.4
45°	811.0	816.8
47.5°	789.4	793.4
50°	762.2	766.1
52.5°	728.1	729.1
55°	687.1	691.1
57.5°	643.3	644.3
60°	594.6	597.5
62.5°	542.9	542.9
65°	488.3	490.2
67.5°	431.8	436.6
70°	374.3	375.3
72.5°	317.7	317.7
75°	259.3	260.3
77.5°	203.7	203.7
80°	151.1	152.0
82.5°	104.3	106.2
85°	65.3	65.3
87.5°	30.2	27.3
90°	28.6	28.6
92.5°	114.5	91.8
95°	399.2	330.3
97.5°	956.7	825.6
100°	1378.4	1222.2
102.5°	1793.1	1659.4
105°	2322.0	2250.1
107.5°	2668.4	2685.9
110°	2800.6	2875.5



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2812.3	2927.4
115°	2737.8	2897.3
117.5°	2579.7	2756.6
120°	2452.2	2624.1
122.5°	2328.1	2497.7
125°	2151.2	2307.4
127.5°	1992.0	2123.8
130°	1898.2	2019.9
132.5°	1813.0	1922.0
135°	1696.3	1790.3
137.5°	1602.7	1679.7
140°	1538.6	1610.5
142.5°	1485.4	1547.3
145°	1405.6	1452.4
147.5°	1344.5	1383.2
150°	1305.9	1337.3
152.5°	1272.9	1296.6
155°	1235.1	1250.8
157.5°	1205.0	1216.1
160°	1187.2	1193.5
162.5°	1175.5	1181.5
165°	1158.6	1164.9
167.5°	1146.4	1149.1
170°	1143.1	1143.1
172.5°	1134.2	1131.9
175°	1128.9	1128.9
177.5°	1124.0	1121.3
180°	1121.3	1121.3

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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	0.17	0.86	1.31	1.99	3.59	13.34	14.02	14.48	15.16	16.75
	3H	0.86	1.48	2.01	2.62	4.23	15.16	15.77	16.31	16.92	18.52
	4H	1.15	1.74	2.31	2.88	4.50	15.79	16.38	16.95	17.52	19.13
	6H	1.39	1.93	2.56	3.08	4.70	16.21	16.75	17.38	17.89	19.52
	8H	1.45	1.97	2.63	3.13	4.75	16.32	16.83	17.49	18.00	19.61
	12H	1.47	1.95	2.64	3.11	4.75	16.38	16.87	17.56	18.02	19.66
4H	2H	7.35	7.94	8.52	9.09	10.70	13.59	14.17	14.76	15.32	16.93
	3H	8.91	9.40	10.08	10.57	12.19	15.61	16.10	16.79	17.27	18.90
	4H	8.99	9.45	10.17	10.60	12.25	16.37	16.82	17.54	17.98	19.62
	6H	8.99	9.38	10.18	10.56	12.20	16.89	17.28	18.07	18.46	20.09
	8H	8.97	9.33	10.15	10.50	12.15	17.05	17.41	18.23	18.58	20.23
	12H	8.91	9.24	10.11	10.43	12.08	17.13	17.46	18.33	18.64	20.30
8H	4H	10.42	10.78	11.60	11.95	13.60	16.41	16.77	17.59	17.95	19.60
	6H	10.65	10.95	11.85	12.17	13.81	17.03	17.33	18.23	18.54	20.19
	8H	10.67	10.93	11.87	12.12	13.79	17.24	17.50	18.45	18.70	20.36
	12H	10.63	10.86	11.84	12.05	13.75	17.38	17.61	18.59	18.80	20.49
12H	4H	10.55	10.88	11.75	12.06	13.72	16.36	16.68	17.55	17.87	19.52
	6H	10.91	11.17	12.11	12.36	14.03	17.01	17.27	18.22	18.46	20.13
	8H	10.97	11.20	12.18	12.39	14.09	17.23	17.46	18.44	18.65	20.35

END OF REPORT